

SUB
D2

C2

3. (Amended) A semiconductor device having a layered interconnection structure including a platinum film overlying a surface of a semiconductor substrate, wherein the layered interconnection structure includes the platinum film and a neighboring film located at at least one of (a) adjacent the platinum film and (b) between the platinum film and the semiconductor substrate, the neighboring film having, as a primary constituent element thereof, an element selected from a group consisting of rhodium, ruthenium, iridium and osmium, wherein the neighboring film substantially prevents voids due to electromigration of the platinum.

SUB
D3

C3

5. (Amended) A semiconductor device having a layered interconnection structure including a platinum film overlying a surface of a semiconductor substrate, wherein the layered interconnection structure includes the platinum film and a neighboring film located at at least one of (a) adjacent the platinum film and (b) between the platinum film and the semiconductor substrate, the neighboring film including an element selected from a group consisting of rhodium, ruthenium, iridium and osmium, wherein the neighboring film substantially prevents voids due to electromigration of the platinum.

Please add the following new claims to the application:

SUB
D4

C4

--13. A semiconductor device having a layered interconnection structure comprising:
a semiconductor substrate;
an insulating film overlying a surface of the semiconductor substrate; and

SUB 7
DH a plug of conductor film electrically connecting the semiconductor substrate with the layered interconnection structure,

wherein the layered interconnection structure overlies the insulating film, and includes a copper film and a neighboring film located between the copper film and the insulating film, the neighboring film having as a primary constituent element thereof, an element selected from a group consisting of rhodium, ruthenium, iridium, osmium and platinum.

C4
Lined 14. A semiconductor device having a layered interconnection structure comprising:

a semiconductor substrate; and

an insulating film overlying a surface of the semiconductor substrate,

wherein the layered interconnection structure overlies the insulating film, and includes a copper film and a neighboring film located between the copper film and the insulating film, the neighboring film having as a primary constituent element thereof, an element selected from a group consisting of rhodium, ruthenium, iridium, osmium and platinum.--